Remarks

This paper is responsive to the Office Action of June 18, 2003. The reconition of allowable subject matter in claims 31 and 32 is noted with appreciation. Nevertheless, amendment, reexamination and reconsideration of the application are respectfully requested.

The Office Action

In the Office Action of June 18, 2003:

The election of claims made in paper number 6 was acknowledged and was characterized as being made without traverse;

Claims 17-22 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 2,942,314 to Debner et al. ("Debner");

Claims 11-13 were rejected under 35 U.S.C. §102(b) as being anticipated by 5,230,488 to Condon ("Condon");

Claims 23-25, 29 and 30 were rejected under 35 U.S.C. §103(a) as being unpatentable over Condon in view of U.S. Patent No. 1,662,539 to Schmidt ("Schmidt").

The Present Application

For purposes of brief review, the present application is directed to a sign hanger for facilitating a hanging of items such as a banner or the like from suspended ceiling grids in a store. The sign hanger is adapted to have a twist lock releasable connection with a ceiling grid. A friction lock structure or protrusion 42, 340, 356, 436, 450, 156, 836, 850 depends from arms 14, 90, 18, 94, 304, 308, 404, 408, 804, 808 to decrease the likelihood of an accidental deinstallation of the sign hanger. Some embodiments include an additional protrusion 864, 156, to further increase the gripping friction. In some embodiments, the additional protrusion is a plateau 864 located on the support surface 861 centrally between two arms 804, 808. All embodiments include one or more object support flange or member 64, 72, 130, 364, 470, 870. Each object support flange or member includes a means for attaching an object. For example, a means for attaching an object can be an eyelet or opening 68, 126, 134, 368, 875, an anchor or a hook 364, 474, 874.

Claim 1 and Claim 3 are Generic

In paper number 5, the Examiner required election between the species of FIG. 1a, FIG. 5a, FIG. 6a, and FIG. 8a and indicated that **claims 11-13** are generic. In response thereto, the applicants elected the species depicted in FIG. 8a and indicated that in addition to

the claims found to be generic by the Examiner, **claims 17-25** and **29-32** were readable on the species of FIG. 8a. In so doing, the applicants overlooked the generic nature of independent **claim 1** and dependent **claim 3**. In summary, **claim 1** recites a support body, a first arm, a second arm, a first protrusion extending from said first arm, a second protrusion extending from said second arm, a contact surface located on a first portion of the support body and a planar object support flange depending from the first portion of the support body and lying substantially in an object support plane which is approximately perpendicular to the support body plane and intersecting a pivot axis. It is respectfully submitted that **claim 1** is readable on the species of FIG. 1a, FIG. 5a, FIG. 6a, and FIG. 8a.

Claim 3 recites at least a first attachment means located on said object support flange for supporting an object. It is respectfully submitted that the species of FIGS. 1a, 5a, 6a, and 8a each include at least a first attachment means located on an object support flange for supporting an object.

For the foregoing reasons, **claims 1 and 3** are generic. Therefore, reinstatement in consideration of **claims 1 and 3** is respectfully requested.

The Claims are not Anticipated

Claims 17-22 were rejected under 35 U.S.C. §102(b) as being anticipated by Debner. In explaining the rejection of **claims 17-22**, the office action asserts that Debner discloses a hanger comprising a rectangular support body 11, first arm with first protrusion 16 adjacent a corner of the support body and a second arm with a second protrusion 12 adjacent opposite corner of support body. However, in Debner, numeral 16 references notches and numerals 11 and 12 refer to S-shaped members (column 2, lines 5 - 17). It is therefore respectfully submitted that numerals 12 and 16 do not reference a protrusion as the term is used in the present application (e.g. a ridge, rib or tapered surface, see the instant specification, for example at page 23, lines 11-18). Also, numeral 11 does not reference a support body. It appears that connecting portion 13 would fulfill that purpose in Debner.

Debner discloses a cord holder including a pair of parallel S-shaped members 11 and 12, which face in opposite directions and are joined together by a central connecting portion 13. The distance between the S-shaped members is substantially equal to the major diameter of the largest size of cord that may be gripped in the holder. The connecting portion 13 separates the holder into opposite end portions 14 and 15. The end 14 is provided with a pair of oppositely facing cord engaging notches 16 in members 11 and 12. A raised abutment or ridge 18 is located on the top and bottom surfaces of the connecting portion 13 to lie

transversely across the cords, which are clamped in the holder. Hence, both small and large cords are clamped or snubbed by the notches 16 as well as deformed out of a straight line position by the ridge 18 to apply a clamping force on the cord. The subject cord holder, while being specially adapted to cord of circular cross section, is also useful on cord having an oval cross section (column 2, lines 5-30).

While the raised abutment or ridge 18 might be considered a first protrusion extending upwardly from a top surface of the cord holder, the cord holder of Debner does not include a second or third protrusion. **Claim 17** recites a first, second and third protrusion.

Even if portions of the S-shaped members 11 and 12 were considered to be arms as recited in **claim 17**, it is respectfully submitted that those portions of the S-shaped members 11 and 12 do not include protrusions as disclosed and claimed in the present application.

It is to be noted that an arm, as the term is used in the present application, includes a stem (e.g. 828, 844) extending upward from a first surface (e.g. 824, 840) and a flange (e.g. 832, 846) supported in a cantilevered manner from the stem (e.g. 828, 844). The first and second protrusions recited, for example, in **claim 17** (e.g. 836, 850, 42) are friction increasing means depending, for example, from the flanges (e.g.832, 846, 34) (page 23, lines 1-23, page 8, lines 33 - page 9, line 7). It is respectfully submitted that Debner does not disclose or suggest such a protrusion (e.g. a ridge, rib or tapered surface) depending from the S-shaped members 11 and 12 as recited in **claim 17**.

Instead, the device of Debner is for clamping two cord links in parallel relation. That is, Debner discloses a cord holder for use with electrical appliances so that a power supply cord may be neatly fastened around an appliance such as a toaster, vacuum cleaner or flat iron, when the cord is not in use (column 1, lines 15-20). As such, the cord holder of Debner does not include a first protrusion extending from a first arm toward a top side of a support body. Nor does Debner disclose a second protrusion extending from a second arm toward the top side of the support body.

Furthermore, Debner is unconcerned with engaging planar surfaces of an associated ceiling grid to resist disengagement from the associated ceiling grid. Indeed, it is respectfully submitted that the cord holder of Debner could not be used to engage the planar surfaces of a ceiling grid. Ceiling grids of the kind contemplated by the present application include a central longitudinal wall (see the two central vertical lines near reference numeral 80 in FIG. 4A of the present application) for supporting the planar surfaces that are engaged by the sign or banner hangers of the present application. It is submitted that the S-shaped members of the cord holder of Debner extend beyond a longitudinal axis of the cord holder. Therefore if

an attempt were made to use the cord holder of Debner as a banner hanger, the S-shaped members would engage the central longitudinal wall of the ceiling grid very early in the installation process, thereby preventing a proper installation.

One concerned with sign hangers for gripping planar surfaces of an associated ceiling grid, would not look to Debner and Debner is non-analogus art with respect to the claims of the present application.

For the foregoing reasons **claims 17**, is not anticipated and is not obvious in light of Debner.

Additionally, **claim 18** recites said first arm is located on a first side of said longitudinal axis and said second arm is located on a second side of said longitudinal axis. As explained above, the S-shaped members of the cord holder of Debner extend beyond a longitudinal axis of the cord holder. Therefore the S-shaped members of Debner cannot fairly be characterized as being located on a first or a second side of the longitudinal axis.

For the foregoing additional reason, **claim 18** is not anticipated and is not obvious in light of Debner.

Claim 22 recites said support body is substantially rectangular. It is respectfully submitted that even if Debner discloses something akin to a support body, that support body is substantially Z-shaped and not rectangular.

For the foregoing additional reason, **claim 22** is not anticipated and is not obvious in light of Debner.

More over, dependent **claims 19, 20 and 21,** which merely further patentably define the detailed subject matter of their parent claim, or each other, are also in condition for allowance over the art of record.

Claims 11-13 were rejected under 35 U.S.C. §102(b) as being anticipated by Condon. However, **claim 11** recites a first object support flange extending away from a bottom side of a support body and a second object support flange extending away from the bottom side of the support body, said first and second object support flanges lying substantially in a single object support plane.

Condon discloses a unitary plastic clamp for mounting a copper water pipe 11 on a HYCO strap 17. The clamp has a split cylindrical clamp portion 12, a rectangular mounting platform 20 and an arm 26 that extends from the clamp portion 12. The platform 20 has a centrally located peg 18, which is inserted into a selected hole in the strap. The platform is then twisted on the strap to engage L-shaped flanges 32, 34 on opposite corners of the platform with opposite side edges of the strap. The arm 26 is then pushed up over the strap to

engage a hook member 30 from the outer end of the arm with a strap edge. The resulting spring force urges the hook member 30 downwardly to cinch the pipe inside the clamp portion and firmly anchor the clamp and pipe relative to the strap.

The Office Action characterizes a planar reinforcing web 22 as a first object support flange and a main portion 26a of the arm 26 of Condon as a second object support flange. However, as defined in the present application, an object support flange includes a means to attach an object to the sign or banner hanger (e.g. page 26, line 29 - page 27, line 6). The Office Action acknowledges this lack of a means to attach an object to the main portion 26a and to the planar reinforcing web 22. The Office Action suggests that this deficiency could be overcome by adding adhesive to these surfaces. However, Condon does not disclose or suggest adhesive. Indeed, Condon does not disclose or suggest that the planar reinforcing web 22 or the main portion 26a be used to support any type of object. Instead, the planar reinforcing web 22 is used to enhance strength (column 3, lines 8-12) and the main portion 26a is used by an installer during an installation process. The installer presses upwardly on the outer end of the main portion 26a until the hook member 30 clears the upper edge of the HYCO strap (column 3, lines 44-47).

The planar reinforcing web 22 and the main portion 26a do not include means for supporting an object. Moreover, Condon does not suggest using adhesive to support an object from the web 22 and main portion 26a. Rather the clamp of Condon is meant to support a pipe 11 from a cylindrical clamp portion 12. Furthermore, it is respectfully submitted that any adhesive strong enough to support an object from, for example, the reinforcing web 22 would necessarily create a permanent bond, thereby defeating the removable nature (page 3, lines 26-29) of the banner hanger of present application. Accordingly, it is respectfully submitted that any motivation for supporting a banner from to the reinforcing web 22 and main portion 26a can only be found in the claims of the present application and is therefore based on impermissible hindsight.

For the foregoing reasons, **claim 11** as well as **claims 12**, which depends therefrom, is not anticipated by and is not obvious in light of Condon.

As to dependent **claim 13,** it recites a first protrusion depending from said first arm and extending toward said top side and a second protrusion depending from said second arm and extending toward said top side, wherein said first and second protrusions releasably engage an associated ceiling grid surface to resist disengagement of said elongated support body from the associated ceiling grid. It is respectfully submitted that Condon does not disclose or suggest first or second protrusions depending from first and second arms. As

explained above, the L-shaped flanges of Condon 32, 34 include a stem and a flange portion but do not include a protrusion such as, for example, the protrusion or tapered wall 859 in FIGs 8D and 8E disclosed and claimed in the present application. A similar argument is made with respect to hook 30 of Condon.

The foregoing additional reasons, **claim 13** is not anticipated and is not obvious in light of Condon.

The Claims are not Obvious

Claims 23-25, 29 and 30 were rejected under 35 U.S.C. §103(a) as being unpatentable over Condon in view of Schmidt. **Claim 23** recites first and second arms extending away from the support body and first and second tapered walls depending from the first and second arms respectively wherein the first and second tapered walls and the support body cooperate to engage an associated ceiling grid member with progressively firmer grip as the object hanger is rotated from a disengaged position relative to the associated ceiling grid into an engaged position.

In making this rejection, the Office Action asserts that Condon discloses a first arm and a first protrusion and a second arm and a second protrusion. As explained above, the applicants respectfully disagree. Condon discloses a first arm including a first stem and a first flange and a second arm including a second stem and a second flange. However, there are no downwardly extending protrusions from the flanges 32, 34 of Condon. Additionally, the Office Action admits that Condon does not disclose the protrusions as comprising tapered walls.

The Office Action relies on Schmidt to teach first and second arms with tapered walls.

Schmidt discloses supporting means for overhead tracks. More particularly, clamping shoes 28 are received above opposite edges of a lower flange 29 of an I-beam. The clamping shoes 28 are provided with rabbets 30, having an upper wall 31 corresponding in form to the form of the upper surfaces at the respective edges of the flange 29, and an outer wall 32, corresponding in form to the form of the outer edges of said flange (page 1, lines 75-83).

The Office Action equates the rabbets 30 of Schmidt with the first and second tapered walls recited in **claim 23**. However, the first and second tapered walls of **claim 23** cooperate to engage an associated ceiling grid member with progressively firmer grip as the object hanger is rotated from a disengaged position relative to the associated ceiling grid into an engaged position. In contrast, the clamping shoes 28 of Schmidt are not rotated into position as disclosed and claimed in the present application. Instead they are bolted into position,

with nuts 35 being received about bolts 34 for clamping the hanger plate and the shoes to the I-beam (page 1, lines 86-92). The rabbets 30 simply allow the shoes 28 to conform to the lower flange 29 of the I-beam. They do not provide a progressively firmer grip as the object hanger is rotated from a disengaged position relative to the associated ceiling grid into an engaged position. Instead, it is submitted that the hanger plate of Schmidt must be held in place while the bolts 34 and nuts 35 are used to secure the shoes 28 to the I-beam. The rabbets 30 simply allow the shoes 28 to evenly engage the I-beam when they are so installed. Thus, Schmidt does not have a rotational axis as recited in **claim 23**.

Additionally, the support means for overhead tracks of Schmidt includes a plurality of pieces (e.g. bolts 34, nuts 35, shoes 28, etc.). One concerned with designing a one piece ceiling grid object hanger would not look to Schmidt. Therefore, Schmidt is non-analogous art and is not properly applied in combination with Condon against the claims of the present application.

For the foregoing reasons, **claim 23,** is not anticipated by and is not obvious in light of Condon and Schmidt, even when taken in combination.

Additionally, **claim 24** recites a plateau located on the support body between the first and second arms, the plateau serving as a pivot area around which the support body is rotated to place the first and second arms into a grip enhancing tension with the associated ceiling grid member when the first and second arms are in engagement with the associated ceiling grid member. It is respectfully submitted that none of Condon, Schmidt, and Debner discloses or suggests a plateau (i.e.; an elevated expanse of level material) located on the support body between the first and second arms. It is respectfully submitted that the peg 18 of Condon is not fairly characterized as a plateau as disclosed and claimed in the present application. For example, see 864 of Fig. 8 of the present application. It is submitted that the peg 18 does not include an expanse of level material. For similar reasons, ridge 18 of Debner is also not fairly characterized as a plateau. Schmidt does not disclose or suggest a plateau or pivoting.

For the foregoing additional reasons, **claim 24** is unanticipated and unobvious in light of Condon and Schmidt, even when taken in combination.

Claim 25 recites a friction increasing plateau located on the support body, between the first and second arms. As explained above, neither Condon nor Schmidt disclose or suggest a friction increase in plateau located on the support body between the first and second arms.

For the foregoing additional reasons, **claim 25** is not anticipated and is not obvious in light of Condon and Schmidt, even when taken in combination.

Dependent **claims 26 - 28** merely further patentably define the detailed subject matter of their parent claim, or each other. As such, these claims are also believed to be in condition for allowance.

Claim 29 recites that first and second tapered walls extend from the first and second flanges respectively and that the first and second tapered walls are connected to the first and second stems by first and second neck regions respectively. Arguments similar to those submitted in support of **claim 23** are submitted in support of **claim 29**.

Additionally, it is respectfully submitted that neither Schmidt nor Condon disclose or suggest that tapered walls are connected to stems by neck regions. Reference numerals 856, 858, and 860 of FIGS. 8D and 8E of the present application show examples of neck regions. It is to be noted that neck regions are thin enough to allow the flanges to flex slightly as the ceiling grid element comes into engagement with the clips. As the neck regions are flexed, an increase spring force is applied between the flanges and the ceiling grid members (page 24, lines 10-34). It is respectfully submitted that the hanger plate, shoes, bolts and nuts of Schmidt are made of metal and are not intended to flex. The only portion of the pipe hanging clamp of Condon disclosed to flex is the clamp portion 12 or mounting arm 26 (column 3, lines 47-53). Neither Condon nor Schmidt disclose or suggest tapered walls connected to stems by neck regions.

For the foregoing additional reasons, **claim 29** is not anticipated and is not obvious in light of Condon and Schmidt, even when taken in combination.

Claim 30 recites that the first and second neck regions have rectangular lower surfaces. The office action does not provide a specific reason for the rejection of **claim 30**. Furthermore, as explained above, neither Condon nor Schmidt disclose or suggest a neck region or a neck region having a rectangular lower surface.

The foregoing additional reasons, **claim 30** is unanticipated and unobvious in light of Condon and Schmidt, even when taken in combination.

The recognition of allowable subject matter in **claims 31 and 32** is noted with appreciation. However, it is respectfully submitted that, for the reasons detailed above, these claims are allowable even in their dependent form.

New **claim 33** includes the subject matter of **claim 17** revised to recite a first rib extending from said first arm toward said support body top side and to recite a second rib extending from said second arm toward said top side, instead of reciting a first and second

protrusion. Even if some portion of the S-shaped members 11 and 12 is considered to be a protrusion extending from an arm toward a top side of a support body, it is respectfully submitted that no portion of the S-shaped members could be construed to be a rib extending from said first arm toward the top side. Support for this amendment can be found throughout the specification and in particular on page 23, lines 15-18.

For the foregoing reasons, new **claim 33** is unanticipated and unobvious in light of Debner, Condon and Schmidt, even when taken in combination.

As explained above, **claims 1 and 3** should be reinstated. **Claim 1** recites the first protrusion extending from a first arm toward a first portion first face of a support body and a second protrusion extending from said second arm toward said first portion first face, wherein said first and second protrusions engage a first surface of an associated ceiling grid to releasably resist disengagement of an object hanger from the associated ceiling grid. As explained above, Debner, Schmidt and Condon do not disclose or suggest first and second protrusions extending from first and second arms as recited in **claim 1**.

For the foregoing reasons, **claim 1,** as well as dependent **claims 3,** is not anticipated and is not obvious in light of Debner, Schmidt and Condon, even when taken in combination.

Telephone Interview

In the interests of advancing this application to issue and compact prosecution, the Applicants respectfully request that the Examiner telephone the undersigned to discuss any of the foregoing with which there may be some controversy or confusion or to make any suggestions that the Examiner may have to place the case in condition for allowance.

Conclusion

Claims 1-10, 14-16 and 26-28 were withdrawn. It is respectfully submitted that **claims 1 and 3** should be reinstated. **Claims 11-13, 17-25 and 29-32** remain in the application. **Claim 33** has been added. For the foregoing reasons, the case is condition for allowance. Accordingly, an early indication thereof is requested.

Respectfully submitted,

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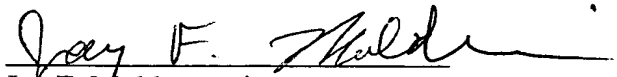

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